Q.630.7
Iℓ6b
no.614
c. 8

UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
ACES

Q. 630.7
Il6b
no. 614

UNIVERSITY OF ILLINOIS
AGRICULTURE LIBRARY

UNIVERSITY OF ILLINOIS · · AGRICULTURAL EXPERIMENT STATION
In cooperation with CORNELL UNIVERSITY AGRICULTURAL EXPERIMENT STATION

FAMILY CASH LIVING AND OTHER OUTLAYS AS RELATED TO GROSS CASH RECEIPTS

For 48 Illinois Farm Families, 1938-1953

By Ruth Crawford Freeman and Ruth E. Deacon

BULLETIN 614

AGRICULTURE LIBRARY
SEP 26 1990
UNIVERSITY OF ILLINOIS

CONTENTS

This publication reports a study made cooperatively by the Department of Home Economics of the Illinois Agricultural Experiment Station and the Department of Economics of the Household and Household Management of the New York State College of Home Economics at Cornell University.

The authors wish to acknowledge the cooperation, valuable suggestions, and advice of the following: Dr. Mabel A. Rollins, Head of the Department of Economics of the Household and Household Management, Cornell University; Dr. Jean Warren, Professor of Economics of the Household and Household Management, Cornell University; members of the Department of Home Economics of the University of Illinois; and members of the Department of Agricultural Economics of the University of Illinois who summarized the farm-business records used in the study.

Particular appreciation is due to the farm families who provided the records and the information about their use of income for sixteen years. Without them, the study would not have been possible.

Urbana, Illinois July, 1957

FAMILY CASH LIVING AND OTHER OUTLAYS AS RELATED TO GROSS CASH RECEIPTS

for 48 Illinois Farm Families 1938-1953

By Ruth Crawford Freeman and Ruth E. Deacon[1]

We never know how much we have to spend is a common expression of farm homemakers when discussing their financial planning. In the past many homemakers could count on the poultry and egg money for family living expenses, but this has changed as farms have become more specialized. Many farms no longer keep poultry, and those that do may have it as a major enterprise, handled as a regular part of the farm business. As a result, family living expenditures must now come out of the current farm business receipts.

Farm families and those who work with them have found it difficult to plan family cash living expenditures in relation to current income. Research has given information on how the components of family living expenditures are related to each other and to total family living expenditures, but the relationship of family living expenditures to gross cash receipts has remained less clear.

Attempts have been made to relate family living expenditures to net income, but it has been difficult to obtain an accurate picture of the net income of farm families. For example, inventory adjustments, which are needed in calculating net income, are by their nature subject to considerable arbitrary judgment. This complication presents more difficulties when income-expenditure comparisons are attempted over a period of years. The use of net income for annual studies does have advantages when, for example, the general income level of farm families is compared with that of other families.

Net income has not been a satisfactory basis for farm families in planning living expenditures. They do not appear to base this

[1] Ruth Crawford Freeman, Associate Professor and Extension Specialist in Family Economics, University of Illinois; Ruth E. Deacon, Associate Professor and Extension Specialist in Economics of the Household and Household Management, New York State College of Home Economics at Cornell University.

year's spending on last year's net income, and they cannot know this year's net income until after the decisions and the spending for farm expenses and other purposes have taken place. Families need a basis that will permit the same kind of consideration to be given to decisions about family living expenditures that is normally given to decisions about spending the other components of the total resources. Farm families want some measure for planning current spending for family living in relation to current receipts.

More attention is at present being given to relating family living expenditures to the gross cash receipts of the farm.[1] An understanding of such relationship may enable a family to improve its money management.

This bulletin approaches family money management from the standpoint of gross cash receipts. It is based on the accounts kept by 48 Illinois farm families continuously for the sixteen years from 1938 to 1953. The bulletin analyzes the ways that these families allocated their gross cash receipts to farm expenses, investments, and family cash living.

The information given here can be useful to farm and home development workers, extension specialists, and others who help farm families plan their money management. The method of analysis — relating family cash living outlays to gross cash receipts — can be applied by individual families to their own situation; how this can be done is discussed in detail on pages 27 to 30. Families can use the data to compare their own allocations with those of similar families in the study, all of which were reasonably successful farm families. The data will also be of interest to those who want to see how one group of Illinois families reacted to changing economic conditions and to other variations.

TERMS AND PROCEDURES

Two general comparisons were made of the use of gross cash receipts. The dollar and percentage relationships of total farm expenses, total family cash living, and total investments to annual gross cash receipts over the sixteen years were studied. Also the degree of variation from year to year in each of these items was

[1] Margaret G. Reid's leadership in the study of the relationship of living expenditures to gross income is recognized by the authors.

studied, and the direction of change in gross cash receipts was compared with the direction of change in expenditures and investments. These comparisons were made in four major ways: for the whole group of 48 families for all the 768 record-years and on the basis of type of farming, age of operator, and 4-year periods within the sixteen years.

No division according to tenancy was made because for three-fourths of the 768 record-years the farms were operated by the families as full owners (411 record-years) or with an owner and tenant combination (167 record-years). The trend was toward increased ownership and toward operation of larger farms:

	Number of families		*Average acres per farm*	
	1938	1953	1938	1953
Owner	22	32	257	276
Owner and tenant	13	10	268	321
Tenant	13	6	197	251

Three type-of-farming classifications were used — livestock, grain, and general. These classifications were on the basis of the organization for the major source of income for the farm business; there were variations, of course, within each classification. Livestock farms had dairy, hog, or cattle operations or some combination of them. On grain farms the major returns were from crops. General farms had a variety of enterprises as a source of income. Thirty of the farms were livestock farms, 9 were grain farms, and 9 were general.[1]

The age of operator was considered in order to obtain information on the effect of the family cycle on expenditure and investment relationships. The 30 livestock farms were divided into groups according to the age of the operator in 1938, the first year of the study. There were 11 families in the younger group (operator under 40 years of age in 1938), 10 in the middle age-group (operator 40 to 49 years of age), and 9 in the older group (operator 50 or older). The place in the family cycle is further indicated in Table 1, where the number of children and other dependents is

[1] Assistance in making type-of-farming classifications was obtained from Dr. L. J. Norton, head of the Department of Agricultural Economics at the University of Illinois until his death in 1956.

given for the 30 livestock farms. General farms and grain farms were too few to divide for similar age-of-operator comparisons.

The four 4-year periods corresponded to periods of changes in average gross cash receipts. In the prewar period (1938-1941) gross cash receipts averaged less than $8,000 per family per year; in the war years (1942-1945) they were between $8,000 and $13,000; in the first postwar period (1946-1949) the averages were from $13,000 to $18,000, and in the second postwar period (1950-1953) they ranged between $17,000 and $20,000.

Gross cash receipts for any one year, as defined in this study, included gross farm income, labor earnings off the farm, earnings on investments, net borrowings, and gifts and inheritances. If a family spent more in a certain year than was covered by the current year's receipts, the past savings that were used were not included in this study as a part of gross cash receipts to balance the outgo.

Farm expenses included all current expenditures for farm business operations, including interest payments and outlays for farm machinery and farm buildings. No inventory adjustments were attempted since the intent of the study was to record cash income and outgo transactions as they took place and to let the net

Table 1. — Number of Dependents on 30 Livestock Farms 1938-1953
(By four-year periods and by age of operator; each person counted once for each year of dependency)

Age of operator in 1938 and period	Number of children in different age-groups					Other adults[b]
	Pre-school (1-5)	Grade school (6-13)	High school (14-17)	College (18-22)	Other[a] (over 22)	
Under 40 years (11 families)						
1938–1941	34	40	8	1	0	1
1942–1945	38	40	17	4	0	2
1946–1949	15	45	23	12	0	0
1950–1953	1	40	20	13	1	1
40 to 49 years (10 families)						
1938–1941	17	39	23	15	0	0
1942–1945	10	31	23	22	1	1
1946–1949	0	16	22	20	7	5
1950–1953	0	6	13	23	3	6
50 years and over (9 families)						
1938–1941	0	5	8	7	6	1
1942–1945	0	3	5	4	7	0
1946–1949	0	0	3	5	10	0
1950–1953	0	0	0	3	4	0

[a] Most of these were living at home but were not dependent.
[b] All dependent adults living at home other than husband, wife, and children.

effects of these activities be reflected in cash operations in later years. Automobile, telephone, and electricity expenses were divided between the farm business and family living according to the families' decisions, usually half to each.

Family cash living outlays were the cash expenditures for the family's purposes. An exception was major housing improvements, which were counted as investments.

Investments included housing improvements, life insurance premiums, net principal payments over borrowings, bond and stock purchases, net increases in bank balances, and other investments. When the total of farm expenses, family cash living, income taxes, and investments exceeded gross cash receipts, the difference represented the amount by which savings of previous years had to be used. Only slightly over $200,000, about 2 percent of the total gross cash receipts, was used in this way by the 48 families during the sixteen years.

VARIATIONS IN THE USE OF GROSS CASH RECEIPTS

A farm family decides after weighing alternatives how much of the gross cash receipts is needed for family living, for farm expenses, for necessary investments, and for income tax. The amounts that families choose to put into these categories are determined by their needs, interests, abilities, and commitments.

Variations Among All 48 Families

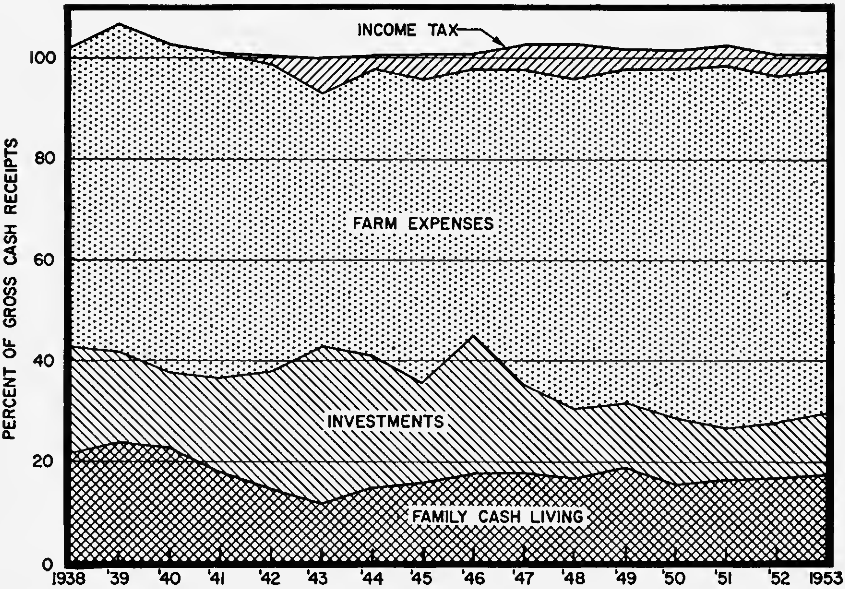
Average gross cash receipts per family were three and a half times as great in the high year as in the low year, ranging from $5,387 in 1938 to $19,445 in 1951 (Table 2). In the next two years they decreased about $1,000 each year. Both farm expenses and investments were four and a half times as high in the highest year as in the lowest year, and family cash living outlays were three times as high. Although investments varied more widely than family living, the 16-year averages were about the same for the two. The coefficient of variation showed that variation was greatest for investments and least for family cash living (also see Table 5, page 15). When each of the three expenditure categories was re-

Table 2. — Annual Distribution of Gross Cash Receipts for Farm Expenses, Family Cash Living, and Total Investments

(Average of 48 livestock, grain, and general farms)

Year	Gross cash receipts	Farm expenses	Family cash living	Total invest-ments	Income tax	Total[a] outlay	Percent of gross cash receipts: Farm ex-penses	Family cash living	Total invest-ments	In-come tax	Total[a] outlay
1938	$ 5,387	$ 3,188	$1,183	$1,130	$ 1	$ 5,502	59	22	21	0	102
1939	5,582	3,644	1,304	1,018	2	5,968	65	24	18	0	107
1940	5,762	3,752	1,299	838	4	5,893	65	23	15	0	103
1941	7,426	4,718	1,360	1,397	6	7,481	64	18	19	0	101
1942	10,145	6,213	1,536	2,284	218	10,251	61	15	23	2	101
1943	12,828	6,390	1,597	3,919	906	12,812	50	12	31	7	100
1944	11,381	6,524	1,745	2,929	336	11,534	57	15	26	3	101
1945	11,524	6,950	1,831	2,277	630	11,688	60	16	20	5	101
1946	12,839	6,822	2,278	3,438	428	12,966	53	18	27	3	101
1947	16,417	10,166	2,982	2,939	801	16,888	62	18	18	5	103
1948	17,915	11,596	3,112	2,525	1,269	18,502	65	17	14	7	103
1949	16,587	10,905	3,231	2,108	734	16,978	66	19	13	4	102
1950	18,369	12,638	2,979	2,430	612	18,659	69	16	13	4	102
1951	19,445	14,064	3,213	1,900	837	20,014	72	17	10	4	103
1952	18,398	12,677	3,217	1,958	748	18,600	69	17	11	4	101
1953	17,180	11,632	3,092	2,112	481	17,317	68	18	12	3	101
Average	$12,949	$ 8,243	$2,247	$2,200	$ 501	$13,191	64	17	17	4	102
Range of annual averages	$ 5,387–19,445	$ 3,188–14,064	$1,183–3,231	$ 838–3,919	$ 1–1,269	$ 5,502–20,014	50–72	12–24	10–31	0–7	100–107
Coefficient of variation	86	109	58	160							

[a] The difference between total outlay and gross cash receipts represents for the most part the extent to which past savings were used in meeting current needs.



Family cash living varied less percentagewise during the 16 years than either farm expenses or investments, particularly in the postwar years. (Fig. 1)

lated to gross cash receipts, the correlation was highest for farm expenses and lowest for investments (see Table 5).

Family cash living was more stable than farm expenses or investments percentagewise. The proportion of gross cash receipts spent for family cash living ranged from a high of 24 percent in 1939 to a low of 12 percent in 1943 (Fig. 1 and Table 2). On the basis of 4-year periods, the proportion was highest during the 1938-1941 period and lowest during the war years. During the last two periods the variation was only from 16 percent for 1946-1949 to 19 percent for 1950-1953.

Variations in farm expenses and investments were much greater than for family living. The proportion of gross cash receipts used for farm expenses ranged from a low of 50 percent in 1943 to a high of 72 percent in 1951. Investments ranged from 10 to 31 percent. Both farm expenses and investments varied most during the 1946-1949 period and least during the 1950-1953 period.

The relative stability of family cash living outlays on a percentage basis meant that when a greater proportion was used for farm expenses, less was available for investments, and vice versa.

The proportion allocated to family cash living declined as gross cash receipts increased. At the same time the tendency was for the proportion devoted to farm expenses to increase with higher gross cash receipts. No definite pattern appeared in the proportion allocated to investments. Of the 192 records in the 1938-1941 period, only 8 had gross cash receipts of $14,000 and over, while 102 of 192 had such receipts in the 1950-1953 period (Table 3).

Income taxes varied greatly among families. The range for total income taxes paid by any one family over the sixteen years was from $55 to $34,108. Fifteen of the 48 families paid more than $10,000 in income taxes over the entire period. The total for all families for all years was $362,764, or 3.7 percent of gross cash receipts.

Table 3. — Distribution of Gross Cash Receipts for Farm Expenses, Family Cash Living, and Total Investments, by Four-Year Periods and by Amount

(Average of 48 livestock, grain, and general farms)

Period	Record-years	Gross cash receipts	Percent of gross cash receipts[a]		
			Farm expenses	Family cash living	Total investments
1938–1941	63	Under $4,000	60	38	13
	83	4,000– 7,999	65	23	14
	38	8,000–13,999	60	15	26
	7	14,000–21,999	71	12	16
	1	22,000 and over	79	16	5
1942–1945	20	Under $4,000	44	35	22
	53	4,000– 7,999	55	25	21
	70	8,000–13,999	55	16	25
	34	14,000–21,999	63	11	24
	15	22,000 and over	55	8	29
1946–1949	14	Under $4,000	41	44	16
	30	4,000– 7,999	40	38	21
	66	8,000–13,999	56	25	15
	44	14,000–21,999	63	19	19
	38	22,000 and over	69	10	17
1950–1953	11	Under $4,000	44	53	2
	34	4,000– 7,999	44	39	16
	45	8,000–13,999	61	26	12
	51	14,000–21,999	61	19	16
	51	22,000 and over	79	11	9

[a] May exceed or be less than 100 percent because of the use of past savings, income-tax payments, or other factors.

Variations According to Type of Farming

Gross cash receipts and farm expenses were greatest on livestock farms. Although gross cash receipts for the sixteen years averaged highest on the livestock farms, the relative increase over the years was greatest on the general farms. Average receipts on general farms were 4½ times as high in the highest year as in the lowest; on livestock farms they were 4 times as high in the highest year; and on grain farms they were 3 times as high. (See Table 4.)

Farm expenses for the livestock farms averaged more than $10,000, twice as much as for the grain and general farms. Differences in annual averages for farm expenses became more pronounced in the postwar years (Fig. 2). For livestock farms, farm expenses were 5 times as high in the highest year as in the lowest; for general farms they were 4½ times as high; and for grain farms 3 times.

For both gross cash receipts and farm expenses, the coefficient of variation was considerably less for grain farms than for the other two types of farms (Table 5).

Average outlays for family cash living were similar for the three types of farms. Families on general farms varied a little more than other families in their average annual spending for family cash living, from a low of $1,019 in 1938 to a high of $3,419 in 1951 (Fig. 2 and Table 4). The difference of $2,400 was $327 more than the difference for livestock farms, which were the most stable, varying from $1,228 in 1938 to $3,301 in 1949 (Table 4).

Investments varied from year to year for all types of farms. The average amounts invested annually on the general farms were somewhat more stable than on either the livestock or the grain farms (Fig. 2). Investments on livestock farms averaged $2,493 annually in comparison with $1,822 on grain farms and $1,602 on general farms (Table 4).

The coefficient of variation was higher on the general farms than on grain or livestock farms for both family cash living and investments, but strikingly so for investments (Table 5). This variability on general farms was influenced by an unusually large investment by one family and a relatively small sample.

Table 4.—Annual Distribution of Gross Cash Receipts for Farm Expenses, Family Cash Living, and Total Investments by Type of Farm

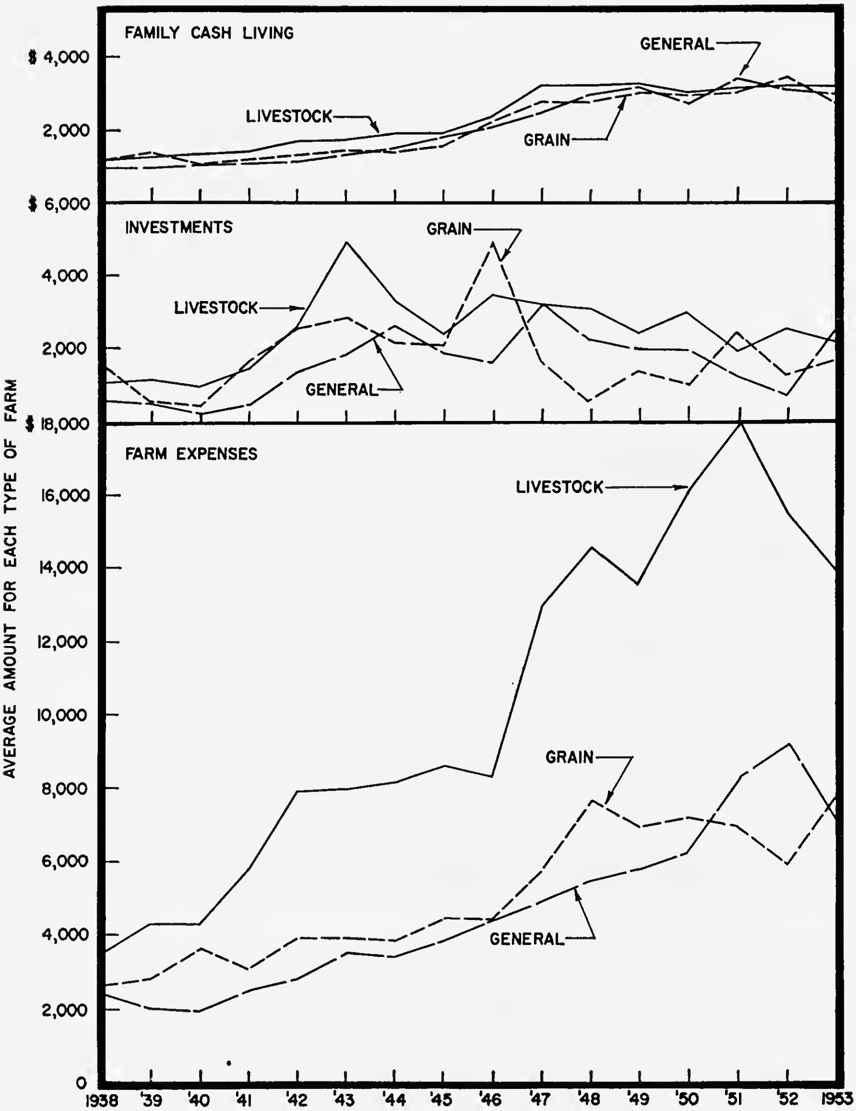
Year	Gross cash receipts	Farm expenses	Family cash living	Total invest-ments	Income tax	Total[a] outlay	Percent of gross cash receipts: Farm ex-penses	Family cash living	Total invest-ments	In-come tax	Total[a] outlay
Average of 30 livestock farms											
1938	$ 5,917	$ 3,567	$1,228	$1,128	$ 0	$ 5,923	60	21	19	0	100
1939	6,669	4,330	1,353	1,274	0	6,957	65	20	19	0	104
1940	6,634	4,292	1,402	1,079	6	6,779	65	21	16	0	102
1941	8,847	5,885	1,460	1,521	7	8,873	67	16	17	0	100
1942	12,288	7,920	1,692	2,461	322	12,395	64	14	20	3	101
1943	15,747	7,962	1,714	4,857	1,142	15,675	51	11	31	7	100
1944	13,697	8,261	1,931	3,260	396	13,848	60	14	24	3	101
1945	13,566	8,661	1,924	2,432	771	13,788	64	14	18	6	102
1946	14,413	8,270	2,331	3,521	507	14,629	57	16	24	4	101
1947	19,578	13,039	3,210	3,233	963	20,445	67	16	16	5	104
1948	21,723	14,600	3,285	3,144	1,519	22,548	67	15	15	7	104
1949	19,720	13,607	3,301	2,373	906	20,187	69	17	12	4	102
1950	22,643	16,142	3,066	2,986	792	22,986	72	14	13	3	102
1951	23,341	17,898	3,184	1,924	1,076	24,082	77	14	8	4	103
1952	22,012	15,736	3,162	2,527	927	22,352	72	14	12	4	102
1953	19,747	14,083	3,229	2,166	552	20,030	71	16	11	3	101
Average	$15,409	$10,266	$2,342	$2,493	$ 618	$15,719	67	15	16	4	102
Range of annual averages	$ 5,917–23,341	$ 3,567–17,898	$1,228–3,301	$1,079–4,857	$ 0–1,519	$ 5,923–24,082	51–77	11–21	8–31	0–7	100–104
Coefficient of variation	81	100	56	134							
Average of 9 grain farms											
1938	$ 5,465	$ 2,655	$1,196	$1,609	$ 0	$ 5,460	49	22	29	0	100
1939	4,377	2,859	1,399	641	4	4,903	65	32	15	0	112
1940	5,233	3,655	1,168	532	0	5,355	70	22	10	0	102
1941	5,887	3,086	1,230	1,785	0	6,101	53	21	30	0	104
1942	7,839	3,957	1,336	2,533	62	7,888	51	17	32	1	101
1943	9,020	4,047	1,434	2,848	718	9,047	45	16	31	8	100
1944	7,434	3,871	1,383	2,157	414	7,825	52	19	29	5	105
1945	8,342	4,421	1,590	2,089	365	8,465	53	19	25	4	101

(Table is concluded on next page)

Table 4. — Concluded

Year	Gross cash receipts	Farm expenses	Family cash living	Total invest-ments	Income tax	Total[a] outlay	Percent of gross cash receipts				
							Farm ex-penses	Family cash living	Total invest-ments	In-come tax	Total[a] outlay
1946	11,806	4,417	2,212	4,850	239	11,718	37	19	41	2	99
1947	11,057	5,834	2,734	1,680	585	10,833	53	25	15	5	98
1948	11,618	7,663	2,724	639	914	11,940	66	23	6	8	103
1949	11,700	6,981	3,081	1,298	446	11,806	60	26	11	4	101
1950	11,262	7,292	2,909	1,069	273	11,543	65	26	9	2	102
1951	13,127	7,012	3,101	2,448	391	12,952	53	24	19	3	99
1952	11,158	5,963	3,464	1,295	487	11,209	53	31	12	4	100
1953	12,654	7,713	2,696	1,685	451	12,545	61	21	13	4	99
Average	$ 9,249	$ 5,089	$2,104	$1,822	$ 334	$ 9,349	55	23	20	3	101
Range of annual averages	$ 4,377–13,127	$ 2,655–7,713	$1,168–3,464	$ 532–4,850	$ 0–914	$ 4,903–12,952	37–70	16–32	6–41	0–8	98–112
Coefficient of variation	59	76	57	130							
Average of 9 general farms											
1938	$ 3,544	$ 2,460	$1,019	$ 656	$ 6	$ 4,141	69	29	19	0	117
1939	3,167	2,144	1,045	543	4	3,736	68	33	17	0	118
1940	3,382	2,049	1,089	338	0	3,476	61	32	10	0	103
1941	4,229	2,461	1,159	596	7	4,223	58	28	14	0	100
1942	5,307	2,780	1,217	1,443	25	5,465	53	23	27	0	103
1943	6,905	3,492	1,369	1,861	307	7,029	51	20	27	4	102
1944	7,609	3,389	1,489	2,598	56	7,532	44	20	34	1	99
1945	7,901	3,776	1,763	1,951	423	7,913	48	22	25	5	100
1946	8,626	4,402	2,167	1,749	356	8,674	51	25	20	4	100
1947	11,242	4,922	2,471	3,218	479	11,090	44	22	29	4	99
1948	11,520	5,513	2,921	2,349	792	11,575	48	25	20	7	100
1949	11,028	5,822	3,150	2,032	447	11,451	53	29	18	4	104
1950	11,226	6,304	2,759	1,938	352	11,353	56	25	17	3	101
1951	12,778	8,339	3,419	1,272	488	13,518	65	27	10	4	106
1952	13,594	9,192	3,153	725	415	13,485	68	23	5	3	99
1953	13,151	7,383	3,029	2,357	273	13,043	56	23	18	2	99
Average	$ 8,451	$ 4,652	$2,076	$1,602	$ 277	$ 8,607	55	25	19	3	102
Range of annual averages	$ 3,167–13,594	$ 2,049–9,192	$1,019–3,419	$ 338–3,218	$ 0–792	$ 3,476–13,519	44–69	20–33	5–34	0–7	99–118
Coefficient of variation	85	103	65	296							

[a] The difference between total outlay and gross cash receipts represents for the most part the extent to which past savings were used in meeting current needs.



The average amount spent for family cash living on the three types of farms was similar over the 16 years. Investments fluctuated considerably, particularly during the war years; total variation was greatest for grain farms and least for general farms. For farm expenses the variation from the low to the high year was more than $14,000 for livestock farms, about $7,000 for general farms, and about $5,000 for grain farms; proportionately also, livestock farms showed the most change from the low to the high year and grain farms the least change. (Fig. 2)

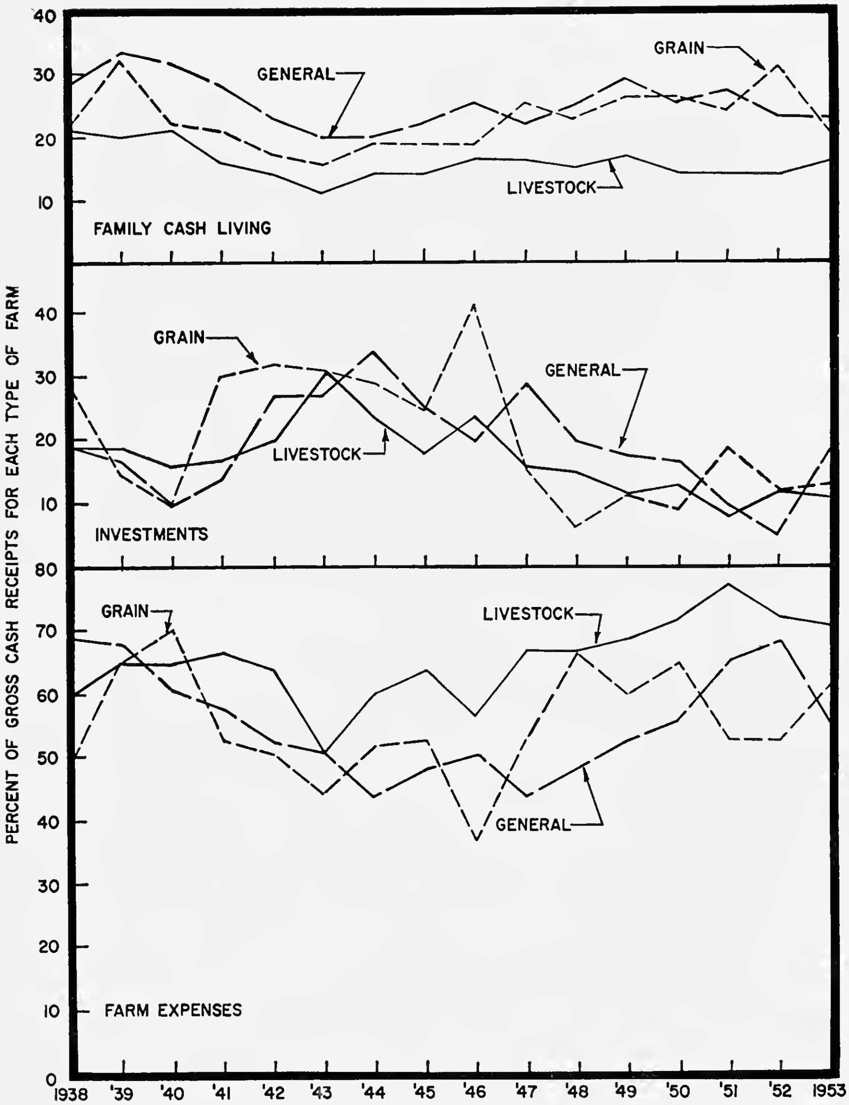
Table 5. — Coefficients of Variation and Correlation Coefficients for Gross Cash Receipts and Each Expenditure and Investment Category

Type of farm and age of operator	Gross cash receipts	Farm expenses	Family cash living	Investments
All 48 families				
Coefficient of variation	86	109	58	160
Correlation coefficient		.93	.56	.44
Type of farming				
Livestock				
Coefficient of variation	81	100	56	134
Correlation coefficient		.93	.53	.49
Grain				
Coefficient of variation	59	76	57	130
Correlation coefficient		.85	.64	.45
General				
Coefficient of variation	85	103	65	296
Correlation coefficient		.90	.78	.34
Age of operator, livestock farms				
Under 40 years in 1938				
Coefficient of variation	77	88	59	121
Correlation coefficient		.96	.68	.50
40–49 years in 1938				
Coefficient of variation	69	86	49	171
Correlation coefficient		.79	.51	.62
50 years or over in 1938				
Coefficient of variation	83	116	55	113
Correlation coefficient		.93	.22	.49

Grain farms showed greatest variation in proportions used for farm expenses, family cash living, and investments. This greater variation on grain farms was accompanied by a smaller relative increase in gross cash receipts than on general or livestock farms, as mentioned earlier (Fig. 3).

In the proportion of annual gross cash receipts that went to farm expenses, grain farms ranged from a low of 37 to a high of 70 percent, livestock farms ranged from 51 to 77 percent, and general farms ranged from 44 to 69 percent. Family cash living on grain farms ranged from 16 to 32 percent, on livestock farms it ranged from 11 to 21 percent, and on general farms it ranged from 20 to 33 percent. Investments on grain farms ranged from 6 to 41 percent, on livestock farms from 8 to 31 percent, and on general farms from 5 to 34 percent (Table 4).

For the period as a whole the average percent of gross cash receipts used for farm expenses was highest for the livestock farms, and consequently the percentages for cash living and investments were lowest on the same farms. That farm expenses and investments move in opposite directions while family cash living remains relatively stable is brought out in Fig. 5, which illustrates



The percent used for family cash living varied least on the livestock farms, where gross cash receipts were highest. The percent used for investments varied considerably for all types and was highest during the war years and immediately after. In all but the first three years the percent used for farm expenses was highest on the livestock farms. (Fig. 3)

the variations in expenditures for three livestock-farm families over the sixteen years.

The coefficient of correlation between gross cash receipts and the expenditure categories for each type of farming was highest for farm expenses and lowest for investments. The correlation coefficient for farm expenses and gross cash receipts was lower for grain farms than for the other two types of farms; the correlation coefficient for family cash living was highest for general farms; the correlation coefficient for investments was lowest for general farms (Table 5).

Variations According to Age of Operator

These comparisons are limited to the thirty livestock farms, divided according to the age of the operators in 1938, of which 11 were under 40, 10 were from 40 to 49, and 9 were 50 or older.

For the entire sixteen years, the younger group had higher average gross cash receipts, farm expenses, family cash living outlays, and income taxes than either of the other two groups (Table 6). For the first five years, the older group was highest, but then the two younger groups gained relative to the older group, particularly in the postwar years. In 1951 gross cash receipts and farm expenses were twice as high for the younger group as for each of the other two groups.

For the younger group, gross cash receipts were 7 times as high in the highest year as in the lowest, and farm expenses were 8 times as high. For the middle age-group, receipts were 4 times as high and farm expenses 6 times as high. For the older group, both categories were 2½ times as high in the highest year as in the lowest.

Family cash living outlays were similar for the two groups in which the operators were 40 years of age or older in 1938; for both groups they were twice as high at the end of the period as at the beginning. For the under-40 group, they were four times as high at the end of the period as at the beginning, when they were somewhat below the average of the other two groups. In the younger group the average family cash living outlay showed an increase over the previous year in all but three years.

Table 6. — Annual Distribution of Gross Cash Receipts for Farm Expenses, Family Cash Living, and Total Investments by Age of Operator on 30 Livestock Farms

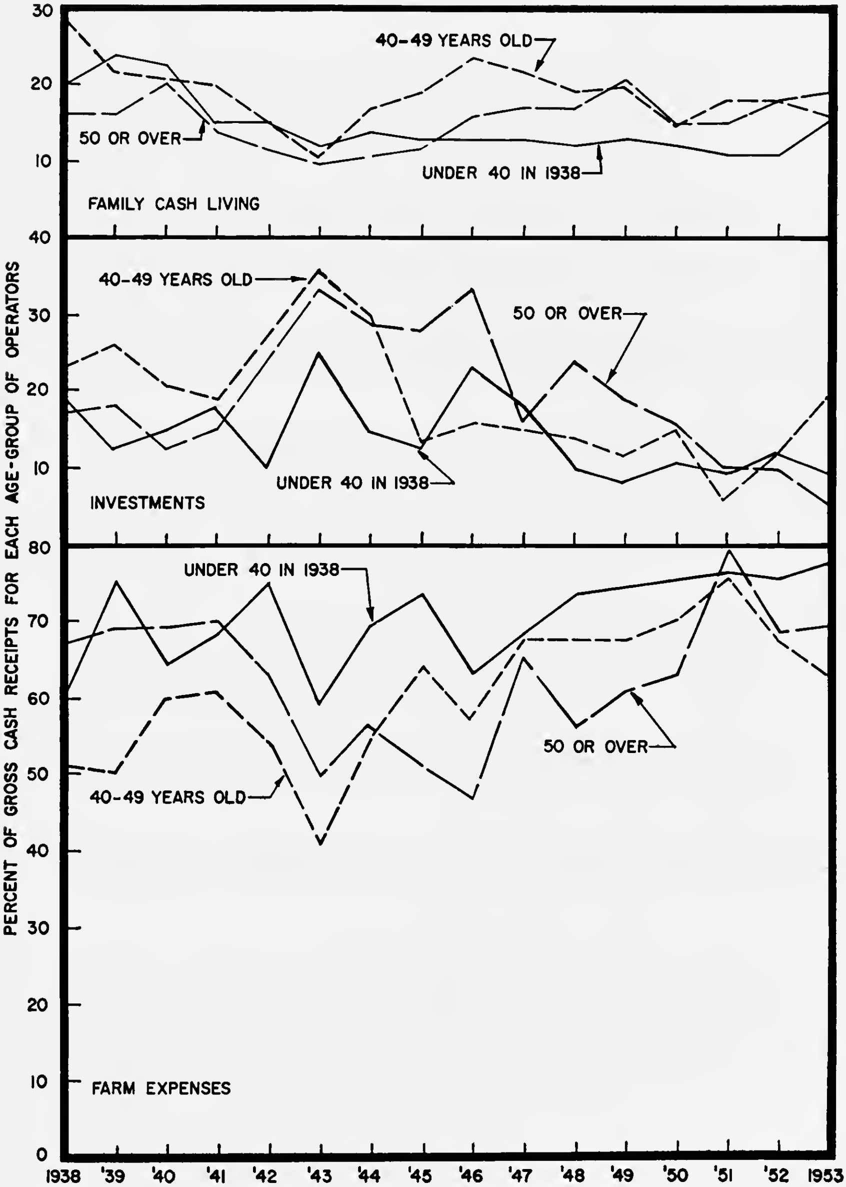
Year	Gross cash receipts	Farm expenses	Family cash living	Total invest-ments	Income tax	Total[a] outlay	Percent of gross cash receipts: Farm ex-penses	Family cash living	Total invest-ments	In-come tax	Total[a] outlay
11 operators under 40 years of age in 1938											
1938	$ 5,490	$ 3,297	$1,090	$1,023	$ 0	$ 5,410	60	20	19	0	99
1939	5,107	3,851	1,246	635	0	5,732	75	24	13	0	112
1940	5,735	3,691	1,293	885	2	5,871	64	23	15	0	102
1941	9,234	6,310	1,418	1,603	0	9,331	68	15	18	0	101
1942	11,848	8,851	1,720	1,191	284	12,046	75	15	10	2	102
1943	16,534	9,819	1,920	4,125	837	16,701	59	12	25	5	101
1944	15,008	10,287	2,155	2,299	386	15,127	69	14	15	3	101
1945	15,976	11,594	2,055	2,143	352	16,144	73	13	13	2	101
1946	19,405	12,233	2,486	4,489	402	19,610	63	13	23	2	101
1947	26,451	17,869	3,470	4,676	1,188	27,203	68	13	18	4	103
1948	28,938	21,247	3,526	2,827	2,176	29,776	73	12	10	8	103
1949	26,264	19,432	3,394	2,183	1,255	26,264	74	13	8	5	100
1950	31,589	23,853	3,739	3,569	898	32,059	75	12	11	3	101
1951	34,402	26,298	3,765	2,990	1,681	34,734	76	11	9	5	101
1952	32,320	24,118	3,663	3,852	1,251	32,884	75	11	12	4	102
1953	26,433	20,440	4,067	2,311	665	27,483	77	15	9	3	104
Average	$19,421	$13,949	$2,563	$2,550	$ 711	$19,773	72	13	13	4	102
Range of annual averages	$ 5,107–34,402	$ 3,297–26,298	$1,090–4,067	$ 635–4,676	$ 0–2,176	$ 5,410–34,732	59–77	11–24	8–25	0–8	99–112
Coefficient of variation	77	88	59	121							
10 operators 40-49 years of age in 1938											
1938	$ 4,831	$ 2,476	$1,381	$1,106	$ 0	$ 4,963	51	29	23	0	103
1939	6,113	3,065	1,336	1,617	0	6,018	50	22	26	0	98
1940	6,480	3,883	1,368	1,350	17	6,618	60	21	21	0	102
1941	7,524	4,545	1,535	1,460	14	7,554	61	20	19	0	100
1942	11,423	6,230	1,701	3,055	496	11,482	54	15	27	4	100
1943	15,110	6,179	1,704	5,373	1,668	14,924	41	11	36	11	99
1944	12,319	6,634	2,053	3,666	281	12,634	54	17	30	2	103
1945	11,051	7,045	2,129	1,507	1,022	11,703	64	19	14	9	106

(Table is concluded on next page)

Table 6. — Concluded

Year	Gross cash receipts	Farm expenses	Family cash living	Total investments	Income tax	Total[a] outlay	Percent of gross cash receipts: Farm expenses	Family cash living	Total investments	Income tax	Total[a] outlay
1946	9,713	5,571	2,320	1,564	277	9,732	57	24	16	3	100
1947	14,393	9,614	3,156	2,117	532	15,419	67	22	15	3	107
1948	16,124	10,784	3,104	2,212	985	17,085	67	19	14	6	106
1949	15,606	10,503	3,139	1,862	546	16,050	67	20	12	4	103
1950	18,076	12,625	2,788	2,667	180	18,260	70	15	15	1	101
1951	17,628	13,296	3,254	1,032	448	18,030	75	18	6	3	102
1952	15,896	10,697	2,911	1,822	515	15,945	67	18	12	3	100
1953	16,802	10,524	2,681	3,144	381	16,730	63	16	19	2	100
Average	$12,443	$ 7,729	$2,285	$2,222	$ 460	$12,697	62	18	18	4	102
Range of annual averages	$ 4,831–18,076	$ 2,476–13,296	$1,336–3,254	$1,032–5,373	$ 0–1,668	$ 4,963–18,261	41–75	11–29	6–36	0–11	98–107
Coefficient of variation	69	86	49	171							
9 operators 50 years of age or older in 1938											
1938	$ 7,646	$ 5,108	$1,226	$1,281	$ 0	$ 7,615	67	16	17	0	100
1939	9,195	6,321	1,500	1,674	0	9,495	69	16	18	0	103
1940	7,905	5,483	1,573	1,015	0	8,071	69	20	13	0	102
1941	9,844	6,853	1,428	1,489	9	9,779	70	14	15	0	99
1942	13,787	8,662	1,649	3,352	177	13,840	63	12	24	1	100
1943	15,493	7,672	1,474	5,179	930	15,255	50	10	33	6	99
1944	13,628	7,592	1,522	3,983	537	13,634	56	11	29	4	100
1945	13,416	6,873	1,535	3,812	1,007	13,227	51	12	28	8	99
1946	13,534	6,425	2,155	4,512	892	13,984	47	16	33	7	103
1947	16,939	10,941	2,951	2,711	1,167	17,770	65	17	16	7	105
1948	19,126	10,717	3,192	4,564	1,310	19,783	56	17	24	7	104
1949	16,295	9,937	3,366	3,174	879	17,356	61	21	19	5	106
1950	16,785	10,623	2,553	2,627	1,341	17,144	63	15	16	8	102
1951	16,170	12,745	2,397	1,611	1,034	17,787	79	15	10	6	110
1952	16,208	11,090	2,828	1,692	988	16,598	68	18	10	6	102
1953	14,847	10,266	2,815	903	604	14,588	69	19	6	4	98
Average	$13,801	$ 8,582	$2,135	$2,724	$ 680	$14,121	62	15	20	5	102
Range of annual averages	$ 7,646–19,126	$ 5,108–12,745	$1,226–3,366	$ 903–5,179	$ 0–1,341	$ 7,615–19,783	47–79	10–21	6–33	0–8	98–110
Coefficient of variation	83	116	55	113							

[a] The difference between total outlay and gross cash receipts represents for the most part the extent to which past savings were used in meeting current needs.



The younger operators used a smaller percent of their gross cash receipts for family living; the middle age-group spent the highest percent in most years and also varied the most. All three age-groups varied considerably in the percent spent for investments. The younger operators spent a larger percent for farm expenses, but the percent fluctuated least. (Fig. 4)

Investments for the entire period averaged somewhat higher for the older group than for the other two groups — $2,724 for the older group compared with $2,222 for the middle age-group, which had the lowest average. Average investments varied considerably from year to year for all three groups.

For all three groups, the coefficient of variation (Table 5) showed relatively less variation for family cash living outlays than for the other three categories. For the two younger groups, investments had a higher coefficient of variation than gross cash receipts and farm expenses; for the older group farm expenses had a slightly higher variation. The coefficients of variation for gross cash receipts, farm expenses, and family cash living were lower for the middle age-group and higher for investments than for the younger and older groups.

The correlation coefficients show that farm expenses were more closely related to gross cash receipts than were family cash living or investments (Table 5). The coefficient of correlation for farm expenses and gross cash receipts was lower for the middle age-group than for the other groups. In the younger group, family cash living was more closely correlated with gross cash receipts than investments were. For the other two age-groups, the reverse was true, with the difference being particularly marked for the group 50 years of age and older in 1938.

Farm expenses were higher and more stable, percentage-wise, for the younger group. The younger group ranged from 59 percent in the low year to 77 percent in the high year; the middle age-group ranged from 41 to 75 percent, and the older age-group ranged from 47 to 79 percent (Fig. 4 and Table 6). For the sixteen years, farm expenses for the younger group averaged 72 percent of the gross cash receipts; the other two groups averaged 62 percent.

Family cash living varied most for the middle age-group. The range was from a low of 10 percent for the older group in 1943 to a high of 21 percent in 1949; the middle age-group ranged from 11 percent in 1943 to 29 percent in 1938 (Fig. 4).

Investments were more stable for the younger group. The percent of gross cash receipts that went into investments for the younger group ranged only from 8 percent in the low year to 25

percent in the high year; the middle age-group ranged from 6 to 36 percent, and the older group ranged from 6 to 33 percent (Fig. 4). For the sixteen years, the younger group had the lowest percentage in investments, averaging 13 percent, while the middle age-group (operators 40 to 49 years old) averaged 18 percent, and the older group averaged 20 percent. Again, the reverse relationship of farm expenses and investments is apparent.

How three of these families, one from each age-group, divided their gross cash receipts is shown in Fig. 5. For each family, invest-

---

How three of the families in the study used their gross receipts. (Fig. 5)

Husband 25 years old in 1938, wife 24, no children. By 1953 there were three children — 14, 12, and 9 years old. Husband a tenant-operator for five years, then in partnership with father on 560-acre livestock farm. Gross cash receipts ranged from $4,356 in 1939 to $67,709 in 1951. Family cash living ranged from $1,087 in 1938 to $5,361 in 1953; as percent of gross cash receipts, it ranged from 6 percent in 1941 to 13 percent in 1953. Farm expenses ranged from $2,662 (58 percent) in 1938 to $60,252 (89 percent) in 1951. Investments ranged from $91 (2 percent) in 1939 to $9,457 (14 percent) in 1952; for eight years the amount was 5 percent or less of gross cash receipts, and for eight years it ranged from 11 to 42 percent. The percent for investments was highest when that for farm expenses was lowest, and vice versa.

Husband 40 years old in 1938, wife 39, and children 14, 16, and 17 (all married by 1953). In 1938 husband a tenant-operator on land owned by mother; in 1953 an owner-operator of the same 320 acres with a $30,000 mortgage on the land. Gross cash receipts ranged from $4,153 in 1939 to $38,194 in 1953. Family cash living ranged from $1,056 in 1939 to $5,446 in 1951; as percent of gross cash receipts it ranged from 8 in 1953 to 33 in 1948, with a median of 10 in the last five years. Farm expenses ranged from $1,969 in 1938 to $30,614 in 1953, and from 41 percent to 81 percent. Investments ranged from $128 (2 percent) in 1940 to $339 (9 percent) in 1953, and from 1 percent in five different years to 28 percent in 1938.

Husband 50 years old in 1938, wife 47, daughter 20 (married in 1949 and a son born in 1952). Husband an owner-operator of 205 acres, paid for in previous twenty years; paid $7,200 for 180 additional acres from 1938 to 1953. Gross cash receipts ranged from $5,832 in 1938 to $18,310 in 1951. Family cash living ranged from $784 (13 percent) in 1938 to $2,872 (20 percent) in 1953; the highest percent was 22 in 1952, the median for the period was 14 percent. Farm expenses ranged from $4,992 in 1938 to $8,075 in 1951; as percent of gross cash receipts, they ranged from 31 in 1945 to 84 in 1938. Investments ranged from $91 (2 percent) in 1938 to the peak of $8,093 (70 percent) in 1944 and down to $1,394 (13 percent) in 1949. The average amount for the sixteen years was $3,900 or 35 percent of gross cash receipts.

ments and farm expenses moved in opposite directions, percentage-wise. The youngest family had the greatest stability in family cash living, and the family in the middle age-group varied the most.

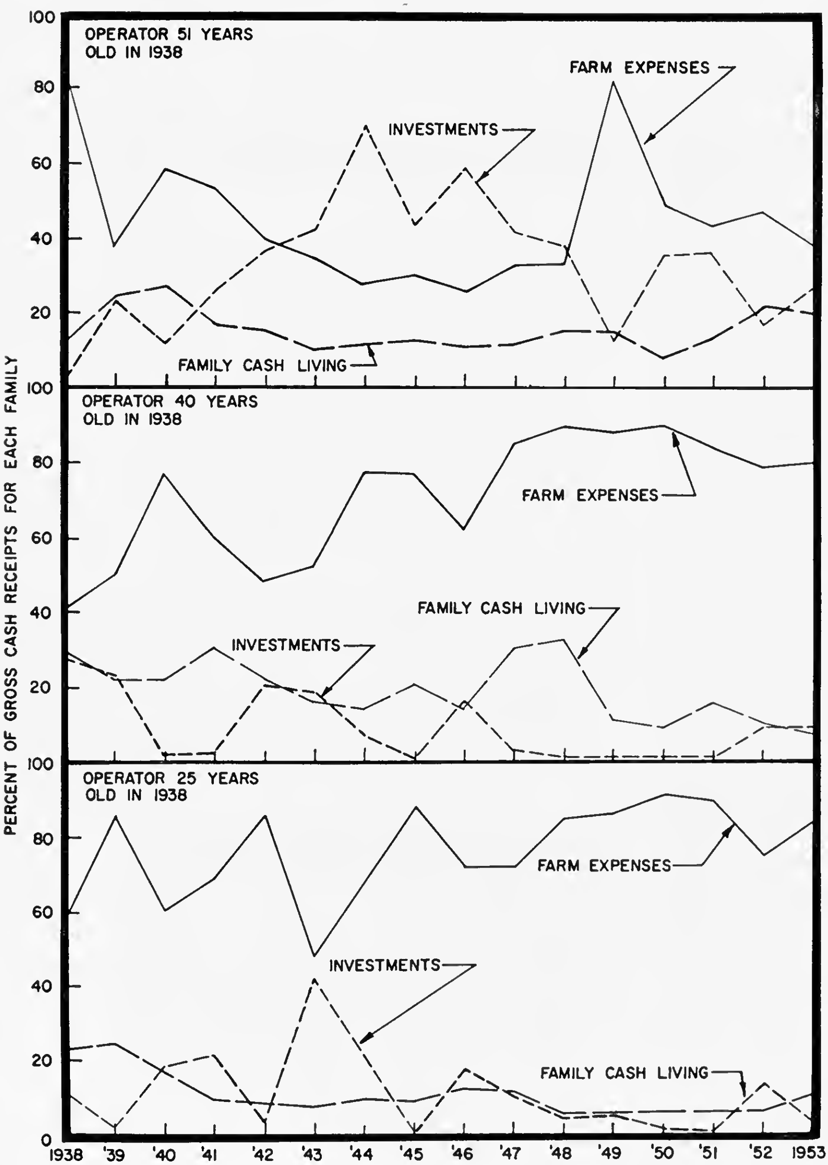


Fig. 5. (See opposite page for explanation)

Table 7.—Average Increases and Decreases From Previous Year in Gross Cash Receipts, Farm Expenses, Family Cash Living, and Total Investments

Year	Gross cash receipts		Farm expenses		Family cash living		Total investments	
	Decreases	Increases	Decreases	Increases	Decreases	Increases	Decreases	Increases
	(number of records and average amounts)							
1939	(24) $1,322	(24) $1,712	(20) $ 838	(28) $1,381	(15) $237	(33) $284	(21) $1,252	(27) $ 776
1940	(16) 2,040	(32) 1,289	(24) 1,006	(24) 1,218	(23) 317	(25) 283	(23) 1,074	(25) 642
1941	(12) 984	(36) 2,547	(20) 693	(28) 2,150	(24) 285	(24) 407	(18) 751	(30) 1,346
1942	(7) 1,991	(41) 3,523	(12) 1,218	(36) 2,400	(16) 283	(32) 405	(17) 1,077	(31) 1,963
1943	(11) 1,208	(37) 3,840	(17) 2,230	(31) 1,495	(18) 380	(30) 325	(21) 764	(27) 3,501
1944	(27) 3,751	(21) 1,516	(19) 1,709	(29) 1,343	(17) 321	(31) 406	(27) 2,773	(21) 1,302
1945	(23) 2,929	(25) 2,970	(20) 1,645	(28) 1,905	(18) 495	(30) 434	(30) 2,450	(18) 2,345
1946	(14) 3,452	(34) 3,278	(21) 2,140	(27) 1,436	(10) 476	(38) 690	(17) 2,852	(31) 3,361
1947	(10) 3,736	(38) 5,502	(9) 1,242	(39) 4,402	(9) 192	(39) 910	(30) 2,565	(18) 2,945
1948	(19) 2,861	(29) 4,354	(21) 2,515	(27) 4,498	(16) 807	(32) 598	(32) 2,130	(16) 3,017
1949	(27) 4,657	(21) 2,951	(23) 4,864	(25) 3,148	(25) 629	(23) 933	(26) 2,543	(22) 2,095
1950	(16) 4,803	(32) 5,964	(21) 2,302	(27) 4,871	(30) 796	(18) 653	(23) 1,942	(25) 2,405
1951	(17) 4,542	(31) 4,158	(17) 3,552	(31) 4,157	(21) 732	(27) 985	(27) 2,677	(21) 2,230
1952	(28) 4,176	(20) 3,333	(29) 4,047	(19) 2,671	(20) 940	(28) 678	(24) 1,881	(24) 1,998
1953	(33) 3,921	(15) 4,727	(29) 3,614	(19) 2,877	(31) 731	(17) 884	(25) 1,866	(23) 2,540

FLUCTUATIONS FROM YEAR TO YEAR

Outlays for family cash living fluctuated less than the other categories. In all years the average dollar change in family cash living from the previous year was less than the changes in gross cash receipts, farm expenses, and total investments. Average year-to-year increases or decreases in family cash living were less than $1,000 for each of the sixteen years. In the other categories, increases or decreases were less than $1,000 for no more than two years. (See Table 7.)

Amount of fluctuation in family cash living increased over the years. The proportion of record-years in which the change in living expenses from the previous year was less than $100 decreased from 30 percent in the 1939-1941 period (14 percent were decreases and 16 percent increases) to 10 percent in the 1950-1953 period (Table 8). The proportion of record-years when changes in either direction were $500 or more increased from 25 percent for the 1939-1941 period to 54 percent in the 1950-1953 period.

The proportion of record-years that showed increases in family cash living over the previous year rose during the 4-year periods until 1949, reflecting the general rise in prices during that time. The proportion declined during the next period, from 70 percent

Table 8. — Amount of Annual Fluctuation in Family Cash Living

Amount of change	Decreases				Increases			
	1939-41	1942-45	1946-49	1950-53	1939-41	1942-45	1946-49	1950-53
	Percent of total records years in period							
Less than $100	14	7	6	5	16	14	6	5
$100–199	5	6	5	4	9	11	4	5
200–299	6	8	2	6	9	10	7	4
300–399	5	3	5	5	7	6	7	4
400–499	2	4	1	4	2	6	6	4
500–599	7	3	1	5	5	4	5	2
600–699	1	2	0	2	4	3	5	3
700–799	1	0	2	5	1	3	2	4
800–899	0	0	3	1	1	2	5	3
900–999	1	0	0	1	1	0	2	2
1,000–1,199	1	1	0	2	1	3	5	4
1,200–1,399	0	0	1	2	1	2	7	3
1,400–1,599	0	0	2	2	0	0	1	2
1,600–1,799	0	0	0	1	0	0	3	0
1,800 and over	0	1	2	6	0	1	5	4
All changes	43	35	30	51	57	65	70	49
	Number							
Record-years of change	62	69	60	101	82	123	132	91
Average change	$285	$373	$585	$792	$320	$393	$775	$805

Table 9. — Relation of Annual Fluctuations in Farm Expenses, Family Cash Living, and Total Investments to Fluctuations in Gross Cash Receipts

Outlays	Direction of annual fluctuations in gross cash receipts		Fluctuations in outlays in the direction of gross cash receipts	
	Decreases	Increases	Decreases	Increases
	(number of record-years)		(percent of record-years)	
1939–1941	52[a]	92[a]	..	..
Farm expenses	...	...	63	66
Family cash living	...	...	46	59
Total investments	...	...	65	70
1942–1945	68	124	..	..
Farm expenses	...	...	56	76
Family cash living	...	...	43	68
Total investments	...	...	81	68
1946–1949	70	122	..	..
Farm expenses	...	...	60	74
Family cash living	...	...	37	72
Total investments	...	...	79	59
1950–1953	94	98	..	..
Farm expenses	...	...	73	72
Family cash living	...	...	57	52
Total investments	...	...	65	60
All record-years	284	436	..	..
Farm expenses	...	...	64	72
Family cash living	...	...	47	64
Total investments	...	...	72	64

[a] There were 48 fewer years in this period since no comparisons could be made with the previous year for 1938.

showing increases in 1946-1949 to 49 percent in 1950-1953, indicating the pressure for adjustments in family cash living in the latter period. During these two postwar periods, for the record-years that showed decreases in family cash living, the change was from an average decrease of $585 annually in 1946-1949 to a greater decrease of $792 in 1950-1953.

Fluctuations in Outlays Related to Gross Cash Receipts

The relative stability of family cash living is also shown by comparing the direction of annual fluctuation in gross cash receipts with the direction of change in family cash living, farm expenses, and total investments (Table 9).

The direction of change in gross cash receipts from year to year was predominantly upward during the first twelve years, when about two-thirds of the record-years in each 4-year period showed increases. In the 1950-1953 period, however, only about half of the record-years showed increases.

The amount of fluctuation was greater for increases than for decreases. In each of the four periods, for more than half of the record-years that showed a decrease, the decrease was less than 20 percent. More than half of the record-years showing an increase, on the other hand, had an increase of more than 20 percent.

Declines in family cash living outlays corresponded less often with declines in gross cash receipts than did farm expenses and total investments. Declines in total investments were most closely related to declines in gross cash receipts, and farm expenses were next. Family cash living outlays decreased least often when gross cash receipts decreased; in each of the three 4-year periods to 1949, less than half of the record-years in which gross cash receipts declined showed family cash living moving in the same direction. In the 1950-1953 period, when there were proportionately more record-years of decreases in gross cash receipts than in the earlier periods, family cash living outlays declined in 57 percent of the record-years in which gross cash receipts decreased.

Increases in family cash living tended to correspond with increases in gross cash receipts. For the four 4-year periods, farm expenses increased in 66 to 76 percent of the record-years in which gross cash receipts increased. Total investments were somewhat less inclined to increase with increases in gross cash receipts, the range being 59 to 70 percent for the four periods. In each of the periods, family cash living increased in more than half of the record-years when gross cash receipts increased, the range being 52 to 72 percent. Considering all of the record-years in which gross cash receipts increased, both total investments and family cash living increased in 64 percent of the cases.

HOW FAMILIES CAN APPLY THIS INFORMATION

Farm families can use the information in this bulletin in at least two ways. Those who work with the families on money management and on farm and home development can show how family living expenditures and investments can be planned by relating them to gross cash receipts in the way done in this study. The families can then compare what they are planning to do with what similar families in this study did.

Following the method used in this study

The approach used here — relating family cash living to gross cash receipts — can easily be applied by farm families. It is more directly related to the way their spending takes place than is a comparison between living expenses and net income. Once a family arrives at a reasonable percentage relationship for family living expenses, this percentage can be applied to the cash receipts of the farm business as they are received.[1] This enables a family that has an irregular income, as most farm families do, to plan ahead, because it has a rough measure of the amount that will be available for family living throughout the year.

Families should, of course, use this method with judgment. Sometimes it will not be practical to take the entire amount from an income check; at other times, more may be taken. But over the year, these variations can balance out to approximately the amount planned on.

Families who have complete financial records can arrive at the percent they have been spending for family living rather easily. All they need to do is to divide their annual cash living expenditures by their gross cash receipts for the same year. To obtain a reasonable percentage, the figure should be calculated for several different years, and these percentages compared. In this way, families will be better able to take into account recent trends in their spending, including the effect of unusual demands.

Families who do not have complete records can probably find a usable percentage by using their recent income-tax reports. These reports will show gross cash receipts and farm business expenditures; the families will probably be able to estimate fairly closely what their investments were. The amount that is left after subtracting investments and farm expenses from gross cash receipts will be approximately what was spent for family living during that year. Again, it is better to make comparisons for several years in order to obtain a more realistic percentage.

[1] Of course, no part of the cash receipts from the sale of crops or animals on which a lien was placed in order to get a production credit loan can be considered for family living. But since the money was allocated for farm business expense, the portion of gross cash receipts used to pay off the loan would represent part of the over-all proportion of gross cash receipts for farm expenses.

Families should not assume that what they have spent in the past is necessarily what they should plan to spend in the future. They may want to raise their present level of living, which would suggest raising the percentage figure unless an increase in income is anticipated. It may be that the figure should be lowered to reduce family living expenditures, although the percent spent for family living tends to remain stable and there is particular resistance to lowering it.

Comparing an individual family figure with those for families in the study

After arriving at a figure that shows what percent of their income they have been spending for family living, most Illinois families may find it helpful to compare the figure with the figures for similar families.[1] The data for the 48 families in this study (representing 768 record-years) offer a chance for such comparison. This does not mean that other families should spend what these families spent, for families differ greatly in their desires and goals.

In comparing the figure for an individual family with those in the study, certain considerations discussed earlier in this bulletin and summarized below should be kept in mind. They may introduce questions or ideas that are as useful to the families in clarifying their own situations as are the actual figures in the tables. They may also explain why the percent an individual family has been spending for family living differs from the percent for similar families in this study.

Type of farm. The percent of gross cash receipts spent for family living by the families in the study varied according to the type of farm. Although livestock farms spent somewhat more in dollars, the proportion was the lowest, about 15 percent; grain farms and general farms averaged about 25 percent.

Age of operator. The data in this study indicate that the percent spent for family living tends to be lower for younger operators, partly because the gross cash receipts are higher than for

[1] Families in states where the living and farming situations are different than in Illinois should consider those differences in using these figures as a basis of comparison.

older operators. The average amount used for family living tended to decline with the higher age-of-operator groups.

Amount of gross cash receipts. Families with high gross receipts are likely to spend a lower percent for family living than other families. In a period of rising income a family may reduce the percentage but not the dollars spent for family living. The 192 record-years studied for the 1950-1953 period show that the percent ranged from 39 or more for families with incomes under $8,000 to 19 or less for those with incomes of $14,000 or more.

Economic situation. In periods of higher economic activity and higher gross cash receipts, the percent spent for family living tended to be lower. A family needs to consider differences in the economic situation when comparing its average figure with those for families in the study.

Year-to-year fluctuations. Since family cash living expenditures are made up of a number of different items, they can be expected to fluctuate somewhat from year to year. The information obtained from these 48 families indicates that fluctuations in the annual total are relatively small for most families. This may mean that families make adjustments in some categories to compensate for changes in others. A major outlay, of course, could not be absorbed in this way and would require other arrangements.

Relating family cash living and other outlays

An attempt has been made here to relate family cash living outlays to the over-all financial situation of farm families. Because the percentage of gross income spent on family living remains relatively stable, it provides families with a basis for planning their future spending.

By also finding out what proportions of gross cash receipts are used for farm expenses and for investments, a family can obtain a more complete picture of how its resources are being distributed. But because these two categories are more variable, it is not suggested that they be used as a basis for planning. Relationships among the individual items within the three broad classifications — family cash living, farm expenses, and investments — will need to be analyzed before the total management possibilities can be evaluated.

REFERENCES

COCHRANE, W. W., and GRIGG, MARY D. The changing composition of family budgets for selected groups of corn belt farmers, 1940-42. U. S. Dept. Agr. Bur. Agr. Econ. 107p. 1946.

CORRELL, MYRTLE GUNSELMAN. Farm incomes and living costs for certain Kansas farm families. Kans. Agr. Exp. Sta. Bul. 327:28-34. 1945.

DEACON, RUTH E. Study of methods for the analysis of family financial adjustments from year to year. Cornell Univ. Agr. Exp. Sta. Memoir 347. 40p. 1955.

FREEMAN, RUTH CRAWFORD. Spending and saving patterns of Illinois farm families from 1933 to 1950. Ill. Agr. Exp. Sta. Bul. 592. 46p. 1955.

FREEMAN, RUTH CRAWFORD, and BANE, LITA. Saving and spending patterns. Amer. Econ. Rev. 34:343-350. 1944.

HEADY, E. O., BOCK, W. S., and PETERSON, G. A. Interdependence between the farm business and the farm household with implications on economic efficiency. Iowa Agr. Exp. Sta. Res. Bul. 398:384-428. 1953.

HOLADAY, HELEN LUCILE. Expenditure patterns of selected Iowa farm families keeping home accounts, 1940-49. Unpublished master's thesis, Iowa State College. 1952.

MACK, RUTH P. The direction of change in income and the consumption function. Rev. Econ. and Statis. 30:239-258. 1948.

REID, MARGARET G. Effect of income concept upon expenditure curves of farm families. Natl. Bur. Econ. Res., Studies in Income and Wealth. 15:133-174. 1952.

REID, MARGARET G., and DUNSING, MARILYN. Effect of variability of incomes on level of income-expenditure curves of farm families. Rev. Econ. and Statis. 38:90-95. 1956.

SUMMARY

Accounts kept by 48 Illinois farm families continuously from 1938 to 1953 were analyzed to see how the families allocated their gross cash receipts to farm expenses, investments, and family cash living.

Average expenditures for family cash living were relatively stable, varying considerably less than farm expenses and investments both in dollars and percentage. The coefficient of variation was also less for family cash living than for the other categories. Farm expenses varied much more in annual dollar averages than investments did, but the coefficient of variation was higher for investments than for farm expenses.

Thirty of the farms were livestock farms, 9 were grain farms, and 9 were general farms. The livestock farms had higher average gross cash receipts, higher average expenditures for both farm and home, and higher average investments than the grain or general

farms over the 16 years. The coefficient of variation for farm expenses was lower for the grain farms than for the other two types, as was also the coefficient of correlation between gross cash receipts and farm expenses. The coefficient of correlation for family cash living was lower for livestock farms than for grain or general farms.

The livestock farms with operators under 40 years of age in 1938 had higher gross cash receipts and higher average expenditures for both farm and home over the 16 years than farms with operators 40 to 49 years of age in 1938 and farms with operators 50 or over. On the livestock farms with younger operators, the proportion of gross cash receipts used for farm expenses was higher and fluctuated less from year to year than on the farms with older operators.

For the 48 families, family cash living represented about 20 percent of gross cash receipts — more on grain and general farms and less on livestock farms, more when gross cash receipts were relatively low and less when they were high. As gross cash receipts increased, the proportion going to farm expenses increased. The proportion allocated to investments was not as clearly related to increases in gross cash receipts as were the proportions going to family cash living and farm expenses. The proportion allocated to family cash living tended to remain relatively stable from year to year while farm expenses and investments shifted up and down in opposite directions.

The stability of family cash living was also brought out by the fact that the degree of fluctuation from year to year was considerably less for family cash living than for farm expenses or investments. Family cash living was somewhat less responsive to increases in gross cash receipts than were farm expenses and investments, but considerably less responsive to decreases in gross cash receipts. Farm expenses tended to have the closest relationship to increases in gross cash receipts, and investments tended to correspond most closely to decreases in gross cash receipts.

UNIVERSITY OF ILLINOIS-URBANA

3 0112 018394913

3 0112 048246018